



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

COMPETENT AUTHORITY CERTIFICATION  
FOR A TYPE B(U)  
RADIOACTIVE MATERIALS PACKAGE DESIGN  
CERTIFICATE USA/9187/B(U)-96, REVISION 9

East Building, PHH-23  
1200 New Jersey Avenue SE  
Washington, D.C. 20590

This certifies that the radioactive material package design described has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a Type B(U) packaging for radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup>.

1. Package Identification - Model No. 865.
2. Package Description and Authorized Radioactive Contents - as described in U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9187, Revision 7 (attached).
3. General Conditions -
  - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
  - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Hazardous Materials Technology, (PHH-23), Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
  - c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.
  - d. Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.

---

<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

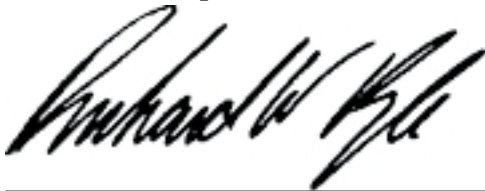
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

**CERTIFICATE USA/9187/B(U)-96, REVISION 9**

4. Marking and Labeling - The package shall bear the marking USA/9187/B(U)-96 in addition to other required markings and labeling.
5. Expiration Date - This certificate expires on July 04, 2009.


This certificate is issued in accordance with paragraph 808 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the January 06, 2009 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



**Feb 06 2009**

(DATE)

 Robert A. Richard

Deputy Associate Administrator for Hazardous Materials Safety

Revision 9 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9187, Revision 7. NRC certificate remains valid under their timely renewal policy.

**CERTIFICATE OF COMPLIANCE  
FOR RADIOACTIVE MATERIAL PACKAGES**

1.	a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
	9187	7	71-9187	USA/9187/B(U)-96	1 OF	2

**2. PREAMBLE**

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

**3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION****a. ISSUED TO (Name and Address)**

QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803

**b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION**

QSA Global, Inc. application dated March 6, 2006,  
as supplemented.

**4. CONDITIONS**

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

**5.****(a) Packaging**

(1) Model No.: 865

(2) Description

A steel encased, uranium shielded radiographic exposure device 5" OD x 12.25" long. The device is provided with 0.88" OD x 9.25" long handle and two 1.38" x 5.5" long triangular shaped legs. Primary components consist of an outer steel shell, internal bracing, depleted uranium shield, and a source tube. The contents are securely positioned in the source tube by a source holder assembly and actuator and locking assembly. Tamper-indicating seals are provided on the packaging and a 0.12-inch thick steel outer cover is bolted over the source actuator and locking assembly for additional protection during transport. The total weight of the package is approximately 59 pounds.

(3) Drawing

The packaging is constructed in accordance with QSA Global Drawing No. R86590, Sheets 1 through 8, Rev. G.

**CERTIFICATE OF COMPLIANCE  
FOR RADIOACTIVE MATERIAL PACKAGES**

1.	a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
	9187	7	71-9187	USA/9187/B(U)-96	2 OF	2

(b) Contents

(1) Type and form of material

Iridium-192 as sealed source must meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

240 curies (output)

Output curies are determined in accordance with American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography."

6. In addition to the requirements of Subpart G of 10 CFR Part 71:

- (a) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in Section 7 of the application; and,
- (b) Each packaging shall be maintained in accordance with the Acceptance Tests and Maintenance Program in Section 8 of the application.

7. The packaging authorized by this certificate is hereby approved for use under the general license provision of 10 CFR 71.17.

8. Revision No. 6 of this certificate may be used until October 31, 2007.

9. Expiration date: December 31, 2008.

REFERENCES

QSA Global, Inc. application dated March 6, 2006.

Supplement(s) dated: August 24, and September 28, 2006.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Robert A. Nelson, Chief  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Date: October 24, 2006



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT  
Model No. 865 Package  
Certificate of Compliance No. 9187  
Revision No. 7

## SUMMARY

By application dated March 6, 2006, as supplemented on August 24, and September 28, 2006, QSA Global, Inc. (QSA or the applicant), submitted an amendment request for the Model No. 865 package. QSA requested approval of a "-96" designation to the certificate and provided a consolidated application. QSA did not request any changes to the package design or its contents. Based on the statements and representations in the application, the staff agrees that the design meets the requirements of 10 CFR Part 71 for a "-96" approval.

## EVALUATION

By application dated March 6, 2006, as supplemented August 24, and September 28, 2006, QSA requested approval for a "-96" designation for the Model No. 865 package. In support of the amendment request for a "-96" approval, QSA submitted a consolidated application. The changes indicated in the regulations for a "-96" designation are not applicable to the 865 package, have no impact on the ability of the package to comply with the final rule, or require no revisions to the package. Changes to the package design are not required in order to meet the provisions for a "-96" designation. The package identification number has been revised to USA/9187/B(U)-96 to indicate that the package meets the requirements of the revised 10 CFR Part 71 regulations that became effective October 1, 2004 (69 FR 3698).

Other minor revisions were made throughout the Certificate of Compliance. Item 3.a of the certificate was revised to indicate a change in ownership of the certificate. QSA Global, Inc., will be reflected as the holder of Certificate of Compliance No. 9187. Condition No. 5(a)(3) was updated to show Revision No. G as the latest revision to Drawing No. R86590. The drawing was revised to reflect a "-96" designation in the package's nameplate. The certificate was revised to include Condition No. 8, which authorizes the use of the previous revision of the certificate for a period of approximately one year. As a consequence of the new Condition No. 8, the previous Condition No. 8, was renumbered 9.

QSA submitted a consolidated application for the Model No. 865 package. The application was updated following revised regulatory guidance. The staff reviewed the application for the Model No. 865 as a "-96" package. As part of the amendment application, QSA modified the format of Section 7, Package Operations, of the application to include detailed descriptions of operations. The modifications and additions were made to clarify the descriptions already included in the approved Safety Analysis Report (SAR) and to provide additional operation descriptions found by the applicant to be necessary. QSA also modified the format of Section 8, Acceptance Test and Maintenance Program. The changes included modifying the terminologies used to refer to the Model No. 865 package, and revisions to the descriptions of the acceptance tests and maintenance programs found by the licensee to be necessary. The staff reviewed the proposed changes and finds that the package operations and the acceptance tests continue to

meet the requirements of 10 CFR Part 71. The staff finds that the maintenance program remains adequate to assure packaging performance during its service life. In addition to reviewing the package's operations, acceptance tests, and maintenance program, the staff also reviewed the documents referenced in the certificate and determined that the documentation was available and complete.

Based on the statements and representations in the application, the staff concluded that the design has been adequately described and meets the requirements of 10 CFR Part 71 for a "-96" approval.

#### CONCLUSION

The Certificate of Compliance has been revised to include a "-96" designation in the package identification number. These changes do not affect the ability of the package to meet the requirements of 10 CFR Part 71. Based on the statements and representations in the application, as supplemented, the staff concludes that the Model No. 865 package meets the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9187, Revision No. 7,  
on October 24, 2006.



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

East Building, PHH-23  
1200 New Jersey Avenue SE  
Washington, D.C. 20590

**CERTIFICATE NUMBER:** USA/9187/B(U)-96, Revision 9

**ORIGINAL REGISTRANT(S):**

Ms. Lori Podolak  
Product Licensing Specialist  
QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803

Ms. Cathleen Roughan  
Director, Regulatory Affairs and QA  
QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803

Mr. Michael Fuller  
Regulatory Compliance Associate  
QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803

**REGISTERED USER(S):**

Mr. R.D. Donny Dicharry  
President  
Source Production and Equipment Company  
113 Teal Street  
St. Rose, 70087-9691  
USA

Mr. William M. Johnston  
Radiation Safety Officer  
Global X-Ray & Testing Corporation  
P. O. Box 1536  
Morgan City, 70381  
USA

Kelly Richardt  
Regulatory and Quality Manager  
Source Production and Equipment Company  
113 Teal St.  
St. Rose, 70087  
USA